SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation:

Formula 1

Use of the substance/preparation:

Card or liquid to clean audio and photographic equipment.

Company/undertaking identification:

AM Denmark A/S
6 Kokkedal Industripark
DK-2980 Kokkedal
Denmark
Phone: +45 – 49 14 22 00
Fax.: +45 – 49 14 11 81
e-mail: sk@am-denmark.com

Emergency telephone:

+45 – 49 14 22 00

Responsible person for the safety data sheet (e-mail):

Peter Waksman, ALTox a/s (pw@altox.dk)

2. Hazards identification

Flammable and irritating liquid with long-term effects.

3. Composition/information on ingredients

% w/w	Name	CAS-no.	EINECS/ELINCS	Classification
25-50	Propan-2-ol	67-63-0	200-661-7	F;R11 Xi;R36 R67

Wording of R-phrases - see section 16.

4. First-aid measures

Inhalation:

Remove to fresh air. Keep at rest. If needed: get medical attention.

Skin contact:

Remove contaminated clothing. Wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact:

Flush with water or physiological salt water for at least 15 minutes. If irritation persists: Seek medical advice.

Ingestion:

Rinse mouth and drink plenty of water. In case of discomfort: Seek medical advice.

Burns:

Flush with water until pain ceases.

Information:

Show this safety data sheet to a physician or emergency ward.

5. Fire-fighting measures

Precautions against fire:

Do not breathe smoke fumes. Remove containers if possible or keep them cool by spraying with water.

Suitable extinguishing media:

Carbon dioxide, dry chemical, sand, foam or water fog.

Non suitable extinguishing media:

Do not use water jet.

Hazardous combustion or decomposition products:

In case of fire, the product may form hazardous decomposition products such as oxides of carbon.

Protective equipment:

When entering burning area: Wear self contained breathing apparatus.

6. Accidental release measures

Personal precautions:
Use personal protective equipment - see section 8. Ventilate the area. Remove sources of ignition.
Environmental precautions:
Avoid large amounts of product entering into drains – see section 12.
Methods for cleaning up:
Wipe up spillage, etc. with paper towels. Clean with water. Further handling of spillage - see section 13.

7. Handling and storage

Safe storage:
Keep in a well-ventilated area. Store in a well-closed original container and in a flammable liquid storage area. Dry, cool (2-8°C) and separated from oxidizing agents.
Specific use(s):
See section 1.

8. Exposure controls/Personal protection

Exposure limits:

Substance	**8-hour TWA**	**15-min STEL**
Propan-2-ol	400 ppm = 999 mg/m^3	500 ppm = 1250 mg/m^3

Exposure controls:
Avoid breathing vapors. Provide sufficient ventilation. Avoid contact with skin, eyes and clothing. Change contaminated clothes. Wash hands and contaminated areas with water and mild soap after use.
The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).
Flammable, do not use near fire or sparks. Do not smoke.

Personal protective equipment:
Respiratory protection:
Normally not necessary if working in well-ventilated area or by short-term use. In case of working in not adequate ventilated areas or prolonged use: Wear self contained breathing apparatus because Propan-2-ol vapours are not absorbed by the filter.
Skin protection:
Use gloves of nitrile rubber or plastic, when there is a risk of prolonged contact with the skin.
Breakthrough time: 3 hours.
Eye protection:
Wear tight fitting safety goggles when risk of splashes.
Environmental exposure controls:
-

9. Physical and chemical properties

Appearance:	Clear liquid
Odour:	Characteristic, pungent.
pH:	-
Boiling point (°C):	-
Flash point (°C):	~ 26
Relative density (g/ml) v/25°C:	~ 1
Water solubility:	Miscible

10. Stability and reactivity

Stability:
Stable under the recommended storage conditions (see section 7). Vapours can be ignited by a spark, a hot surface or a glow. Vapours are heavier than air.
Conditions to avoid:
Formation of sparks and glows. Excessive heating and sources of ignition.
Materials to avoid:
May react strongly with oxidizing agents.
Hazardous decomposition products:
When heated to high temperatures (decomposition) it emits toxic fumes such as oxides of carbon.

11. Toxicological information

Routes of exposure:
Skin, lungs and gastrointestinal tract.

Acute toxicity:

Inhalation:
Vapours may cause irritation to the airways. Inhalation of larger amounts may induce discomfort, nausea, dizziness, headache, narcosis and unconsciousness.

Skin:
Degreases skin. Can be absorbed through skin and induce symptoms mentioned for "Inhalation".

Eyes:
Causes irritation with redness.

Ingestion:
May irritate the mucous membranes. May cause symptoms like nausea, vomiting, diarrhoea and symptoms mentioned for "Inhalation".

Long term toxicity:

Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system. Prolonged or frequent contact can cause eczema and inflammation of the skin as a result of degreasing.

12. Ecological information

Ecotoxicity:
Propan-2-ol is slightly toxic to fish. LC_{50} (fisk, 96h) = 1,4 – 11,1 g/l.

Mobility:
Soluble in water and good mobility in the aquatic systems is expected.

Persistence and degradability:
Propan-2-ol is readily biodegradable

Bioaccumulative potential:
No significant bioaccumulation is expected (computer model)

Other adverse effects:
-

13. Disposal considerations

Comply with national and local regulations. The preparation is to be considered as hazardous waste.

EWC-code:
20 01 13

14. Transport information

UN-no	Proper shipping name	Class	Packing group	
1987	ALKOHOLS, N.O.S. (Propan-2-ol)	3	III	(ADR/RID)

15. Regulatory information

EC-no.: -
Danger symbol:

Irritant

Content: Propan-2-ol

Risk- and Safety-phrases:
R 10: Flammable.
R 36: Irritating to eyes.
R 67: Vapours may cause drowsiness and dizziness.
S 2: Keep out of the reach of children.
S 23: Do not breathe vapour/spray.
S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 46: If swallowed, seek medical advice immediately and show this container or lable.
S 51: Use only in well-ventilated areas.

Restriction on application:
Must not be used by persons under 18 years of age.

16. Other information

R-phrases mentioned in section 2 and 3:
R 10: Flammable.
R 11: Highly flammable.
R 36: Irritating to eyes.
R 67: Vapours may cause drowsiness and dizziness.

Training advice:
No special training is required. However, the user should be well instructed in the execution of his task and be familiar with this safety data sheet.

Further information:
The safety data sheet is prepared according to REACH regulation (EC) No. 1907/2006.

Edition No.:	Date (revision):	Changes in section(s):
1	4 April 2008	-

Prepared by: ALTox a/s - Godthaabsvej 177 - 2720 Vanloese - Phone +45 - 38 34 77 98 - Fax: +45 - 38 34 77 99 / PW - Quality control: EL